

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411620017-9

DVORAK, B.

"Conditions in a restored fish pond in the first vegetative period.",
p. 95, (SRORNIK, Vol. 26, #1/2, Feb 1953, Czechoslovakia)

SO: Monthly List of East European Accessions, Vol. 2, #8, Library of
Congress, August 1953, Uncl.

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CIA-RDP86-00513R000411620017-9"

DVORAK, B.

DVORAK, B., MUDr.

Successful organization of the fight against absenteeism for disease & injuries carried out by Prague physicians. Cesk. zdravot. 5 no.9: 523-526 Sept 57.

1. Vedouci oddeleni pece o pracujici, zdrav. odbor UNV h. m. Prahy.
(INDUSTRIAL HYGIENE
absenteeism, prev. in Czech. (Cz))

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CIA-RDP86-00513R000411620017-9

STIKSA, J.; DVORAK, B.; PALEC, R.; SOUKUP, V.

Evaluation of working ability. Cesk. zdravot. 6 no.9:540-547 Sept 58.
(DISABILITY EVALUATION (Cz))

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1

ONE ENCL: CO

DVORAK, Bretislav, inz.

Conference on irrigation equipment and its operation. Vest ust
zemadel li no.10:424-425 '64.

DVORAK, Bretislav, inz.

For the increase of soil fertility. Vest ust zemedel 12 no.2:49
'65.

DVORAK, Bretislav, inz.

By the new technology to a better production economy. Vest ust
zemadel 12 no.3:135 '65.

1. Administration of Scientific and Technical Development of
the Ministry of Agriculture, Forestry and Water Resources, Prague.

DVORAK, Bretislav, inz.

Role of the establishments of Agricultural Research Institutes.
Vest ust zemedel 12 no.4:149 '65.

Seminar on the effectiveness of large area irrigations. Ibid.:
161-163

Tasks of the research in the field of land improvement and
irrigation in the coming years. Ibid.:173-174

1. Administration of the Scientific and Technical Development
of the Ministry of Agriculture, Forestry and Water Resources,
Prague.

DVORAK, Dalibor, inz.

Special machines for blade production in the Zavody Jana Svermy
Praha. Zpravodaj VZLU no.3:121-125 '63.

LAURENC, Vilém; SOCH, Karel; NECKAR, Ferdinand, inz., CSc.; ZAK,
Vladimir, inz.; SLABA, Jaroslav, RNDr.; DVORAK, Dalibor, inz.;
MASEK, Zdenek, inz.

Discussion. Pt.2. Zpravodaj VZLU no.3:173-176 '63.

DVORAK, Dusan

For maximum use of capital funds in chemical industries. Chem
prum 13 no.1:1-2 Ja '63.

1. Ministerstvo chemickeho prumyslu.

DVORAK, Dusan

Considerations on the resolution of the 12th Congress of
the Communist Party of Czechoslovakia. Chem prum 13 no.2:57-59
F '63.

1. Ministerstvo chemickeho prumyslu.

DVORÁK, Eduard

Projektovani strojirenskych zavodů. (Designing of Machinery Enterprises; a university textbook. 1st ed. illus., bibl.) For the students of the Faculty of Mechanical Engineering. Prague, SNTL, 1957. 122 p.

Bibliograficky katalog, CSR, Ceske knihy, No. 36. 15 Oct 57. p. 787.

DVORAK, E.; AND OTHERS

Notes on the Czechoslovak standard No. 38 3350 concerning heat supply.
p. 323.

ENERGETIKA. Praha, Czechoslovakia. Vol. 9, No. 6, June 1959

Monthly list of East European Accessions. (EEAI) LC, Vol. 8, No. 10
Oct. 1959.
Uncl.

BLAZHEK, L. [Blazek,L.] (Chekhoslovakija); DVORZAK, E. [Dvorak,E.]
(Chekhoslovakija); MYSHIK, S. [Mysik,S.] (Chekhoslovakija)

Agglomeration of butadiene-styrene latex particles by freezing.
Part.I: Effect of the nature of emulsifier, pH of latex and
temperature of freezing on the agglomeration of butadiene-
styrene latexes. Koll.zhur. 26 no.6:657-661 N-D '64
(NIRA 18:1)

DVORAK, Eduard, inz.; RANDA, Frantisek, inz., arch.

System of individual buildings in machine factories.
Tech praca 15 no.10:793-799 0 '63.

S/081/62/000/022/069/088
B166/B144

AUTHORS: Lánicek, Dušan, Škrabal, Bernard, Dvořák, Emil

TITLE: Emulsion polymerization of vinyl monomers and mixtures of these in an acid medium

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 519, abstract 22P290 (Czech. patent 97902, Jan. 15, 1961)

TEXT: Emulsion polymerization of butadiene, styrene, acrylonitrile, mixtures of these, or these monomers together with methacrylic acid, is carried out between -5 and +15°C (preferably +5°C) in the presence of a cation-active emulsifier or inorganic acid, organic acid (or a mixture of these) and suitable buffers. The redox initiator system consists of isopropyl benzene hydroperoxide, sodium formaldehyde sulfoxylate (Rongalite C) and soluble Fe²⁺ salt. Apart from the fact that the initiators are readily available, the advantage of the method lies in a high degree of conversion being achieved in a short time and the consequent possibility of producing concentrated latexes directly in the reactor. Example. 100 parts by weight

Card 1/2

Emulsion polymerization of vinyl ...

S/081/62/000/022/069/088
B166/B144

styrene and 1.4 parts by weight methacrylic acid are polymerized at 5°C and pH 4 in the presence of 159 parts by weight water, 3.58 parts by weight sodium diisopropyl naphthalene sulfonate, 0.08 parts by weight sodium formaldehyde sulfoxylate, 0.008 parts by weight Fe²⁺ salt and 0.159 parts by weight diisopropyl benzene hydroperoxide. In 3 hrs the conversion reaches 80%. [Abstracter's note: Complete translation.]

Card 2/2

Journal of the American Statistical Association, 1937, Vol. 32, No. 188, pp. 1-15.

position of the wire, and the
wire, brittle material, is
in a large position, readily

In addition of earlier studies,
new unknowns in the expression
arise from the standpoints of
the instance and the
operator. The instance and
operator develops the coefficient
of the lower order terms, where
as the arrangement of the terms
in the standpoint, it expresses

and the effect of the resistances of the
various parts of the circuit. The
possibility of the
example will be explained.
and the partial charges were
obtaining by staggering the
and the effect of distance between
of a device for measuring the
described. Drig. art. has

Proprietary, Prop 20

1780

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CIA-RDP86-00513R000411620017-9"

CZECHOSLOVAKIA

DVORAK, Frantisek, Department of Botany of the J.E. Purkyne University
(Katefria botaniky University J.E. Purkyne,) Brno.

"Hesperis pycnotricha Borb. et Deg. in Czechoslovakia."

Bratislava, Biologia, Vol 18, No 7 , 1963; pp 527-530.

Abstract: Brief description of a species of biannual plant which had
heretofore not been known to grow in Slovakia, main habitat being Southern
Russia. Map, 3 references: Czech, Hungarian, Soviet.

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25

JANDA, M.; DVORAK, F.; EXNER, O.

Chlormethylation in the thiophene group. Part 4: On the α -substituted 5-methylthiophene-2-carbonic acid and 5-methylpyromusic acid. Coll Cz Chem 27 no.5:1191-1198 My '62.

1. Institut fur organische Chemie, Technische Hochschule fur Chemie, Prag (for Janda and Dvorak). 2. Polarographisches Institut, Tschechoslowakische Akademie der Wissenschaften, Prag (for Exner).

DVORAK, F.

Assembly of the Morava television transmitter. p.361

INZENYRSKE STAVBY. (Ministerstvo stavebnictvi)
Praha, Czechoslovakia Vol. 7, no. 10, Oct. 1959.

Monthly List of East European Accession, (EEAI), LC, Vol. 8, No. 12, Dec. 1959
Uncl.

S/081/62/000/022/020/088
B144/B101

AUTHORS: Janda, M., Dvorák, F.

TITLE: Chloromethylation in the thiophene series. III. Synthesis and chloromethylation of 2-propynyl thiophene

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 22, 1962, 199-200, abstract 22Zh163 (Collect. Czechosl. Chem. Commun., v. 27, no. 2, 1962, 372-376 [Germ.; summary in Russ.])

TEXT: A new method is described for synthesising 2-propynyl thiophene (I) which is an intermediate product in the synthesis of the antibiotic Unipal, 5-propynyl thiophene-2-aldehyde. The chloromethylation of I is studied. The solution of 0.54 mole 2-propionyl thiophene (II) in 150 ml absolute ether is added dropwise within 20 min to a stirred suspension of 0.24 mole LiAlH₄ in 400 ml ether, the mixture is boiled for 5 hrs, after which 9 ml water, 9 ml 15% NaOH solution, and 27 ml water are successively added and it is stirred for 10 min, the precipitated salt is separated and after removal of the ether 1-(thienyl-2)-propanol-1, C₇H₁₀OS (III) is ob-

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Chloromethylation in the thiophene ...

S/081/62/000/022/020/088
B144/B101

tained; yield 95%, b.p. 102-105°C/10 mm Hg. III in the form of K alcoholate is converted to the xanthate (IV), working successively with equimolar CS₂ volumes and, after stirring for 10 hrs (20°C), with CH₃I. IV is decomposed by column distillation at a bath temperature of 150-200°C, from the distillate 2-propenyl thiophene, C₇H₈S (V), is separated by distillation; yield 81%, b.p. 63°C/14 mm Hg. V is converted by the action of the equimolar Br₂ quantity in CCl₄ at 80°C into 2-(α,β-dibromo-propyl) thiophene (VI). Nonpurified VI (0.14 mole) is added dropwise to tert-C₄H₉OK (from 0.54 mole tert-C₄H₉OH and 0.27 mole K in 150 ml toluene), the mixture is boiled for 20 hrs, when tert-C₄H₉OH is distilled-off, decomposed by cold water and I is separated; yield 72.7%, b.p. 120-122°C/15 mm Hg, n_D^{20.5} 1.5879. When VI is dehydrobromated with powdered KOH in tetrahydrofuran, 2-bromo-propenyl thiophene of undetermined structure, C₇H₇BrS (VII) is obtained; yield 39.4%, b.p. 128-130°C/33 mm Hg, n_D²⁰ 1.6010. Owing to the action of

Card 2/4

S/081/62/000/022/020/088
B144/B101

Chloromethylation in the thiophene ...

tert-C₄H₉OK, VII is converted to I with a yield of 55.3%. By interaction of 0.04 mole I with 0.12 mole 40% formalin and 20 ml 37% HCl (3 hrs, 50-60°C, stirring) 5-chloromethyl-2-propiothienone, C₈H₉ClOS (VIII) is obtained; yield 47%, b.p. 125°C/0.5 mm Hg. By oxidation with Pb(NO₃)₂ VIII is converted to 5-propionyl-2-thiophene aldehyde (IX), b.p. 87-89°C/1 mm Hg; 2,4-dinitro phenyl hydrazone, C₁₄H₁₂N₄O₅S, m.p. 199-201°C (from alcohol). IX also can be obtained, by treating VIII according to Sommelet (boiling with urotropin in CHCl₃ and subsequent hydrolysis). When 18.6 g II is chloromethylated in aqueous medium analogously to I, 2-propionyl 5-hydroxy methyl thiophene, C₈H₁₀O₂S, is obtained; yield 5.2 g, b.p. 134°C/0.4 mm Hg, m.p. 124°C (from ether and water). When 0.16 mole II are brought into reaction with 7.1 g paraform and 5.4 g anhydrous ZnCl₂ in 80 ml CHCl₃ (25-30°C, 3 hrs flow of dry HCl gas), VIII is obtained with a yield of 34.2%. The structure of VIII and IX is identified by oxidizing VIII with dilute HNO₃ to thiophene-2,5-

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Chloromethylation in the thiophene ...

S/081/62/000/022/020/088
B144/B101

dicarboxylic acid, yield 87%; and to dimethyl ester, m.p. 147-148°C (from CH₃OH). VIII obtained from II is oxidized with Pb(NO₃)₂ to IX, C₈H₈O₂S, yield 59.4%, b.p. 76°C/0.6 mm Hg. By 2 hrs boiling with 3.3 g Pb(NO₃)₂ in 25 ml water, 1.2 g I is converted to II, yield 51%, b.p. 88-90°C/8 mm Hg; and to dinitrophenyl hydrazone, C₁₃H₁₂N₄O₄S, m.p. 205-206°C (from alcohol). Communication II: see RZhKhim, 1962, 5Zh239.
[Abstracter's note: Complete translation.]

Card 4/4

DVORZAK, Frantisek [Dvorak, Frantisek], inzh.

Czechoslovak research in the field of commutators of d.c.
machines. Izv. vys. uch. zav. elektromekh. S. no.81937-943
'62. (MIRA 15:8)

1. Nauchno-issledovatel'skiy institut elektrotehniki v Bukhovitse,
Chekhoslovakiya.
(Czechoslovakia--Electric machinery--Direct current)

Z/006/60/000/018/001/001
D006/D102

AUTHOR: Dvořák, František

TITLE: A tower above the countryside

PERIODICAL: Technické noviny, no. 18, 1960, 6

TEXT: The Jižní Čechy (South Bohemia) TV relay station was built 20 m below the summit of Klet Mountain (1,080 m above sea level) near Holubov. According to information furnished by Architect Jan Šesták of the odbor výstavby KNV (Construction Department, KNV) in České Budějovice, construction of the relay station started in April 1958 and was completed on May 1, 1959. The antenna tower is 116.5 m high, 14.5 m wide at the base, and 2.5 m wide at the top, and was produced by the Vítkovické železárny (Vítkovice Iron Works). The control cabin is located at a height of 30 m. Electric power is supplied from Třísov through a 6.5-km long, high-voltage overhead line and a 500-m underground cable. Water is pumped from a reservoir located 1 km from the station, 80 m below the summit of Klet Mountain. A 1,750-m long chair-lift, with 23 masts of seamless

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A tower above the countryside

Z/006/60/000/018/001/001
D006/D102

steel tubes, will be built from Krasetín to the station to provide transportation for station personnel who reside in Holubov. The equipment for the chair-lift will be produced by the národní podnik Transporta (Transporta National Enterprise) in Chrudim and the Vodní Stavby (Hydraulic Construction Enterprise) in Sezimovo Ústí will be in charge of the construction work. Construction of a 3.5-km long road has already started from the Holubov railroad station to the chair-lift station. Currently, a small observatory is being built on top of Klet Mountain by workers of the České Budějovice Observatory. There are 3 figures.

Card 2/2

DVORAK, F.

Assembling of the Moravia television transmitter. (Conclusion) p. 417

INZENYRSKE STAVBY. (Ministerstvo stavebnictvi) Praha, Czechoslovakia.
Vol. 7, no. 11, Nov. 1959

Monthly list of East European Accessions (EEAI) LC, vol. 9, no.1, Jan.
1960

Uncl.

PROKOP, J., inz.; DVORAK, F., inz.

Properties of Czechoslovak kaolins used for coating mixtures.
Sbor cel pap no.78229-244 '62.

PROKOP, Jiri, inz.; JASA, Jaroslav; DVORAK, Frantisek, inz.

Use of domestic butadiene-styrene lattices for surface
finishing of paper. Papir a celulosa 18 no. 12: 246-249
'63.

1. Vyzkumný ustav papíru a celulosy, pracoviste Praha
(for Prokop and Jasa).
2. Ministerstvo chemického průmyslu (for Dvorak).

SILENY, Karel; DVORAK, Frantisek; SHANEL, Jan

Organization of the joinery production in Suchdol nad Luznicí.
Drevo 18 no.8:301-305 Ag '63.

1. Jihoceske drevarske zavody, n.p., Ceske Budejovice.

DVORAK, Frantisek

Electrolytic fluorination of organic substances in anhydrous hydrogen fluoride. Chem listy 59 no.6:698-716 Je '65.

1. Chair of Organic Chemistry of Higher School of Chemical Technology, Prague.

KNOTZ, F.; DVORAK, F.

Problem of prevention of atelectasis. Bratislav. lek. listy 34 no.2:
186-189 F '54.

1. Z Chirurgickej kliniky LFSU v Kosiciach, prednosta prof. dr.

J.Knazovicky.

(ATELECTASIS,

*postop., prev.)

(LUNGS, surgery,

*postop. atelectasis, prev.)

DVORAK, F.

Malignant pheochromoblastoma. Bratisl. lek. listy 34 no. 4:420-425
Ap '54.

1. Z Chirurgickej kliniky LFŠU v Košicach, prednosta prof. dr.
J.Knázovický.

(PARAGANGLIOMA,

*breast)

(BREAST, neoplasms,

*paraganglioma)

DVCRAK, Frantisek, inz.

Building apartments houses in the form of hollow cylinders.
Inz stavby 12 no.11:518-519 N '64.

DVORAK, F., inz.

Pipe cleaner. Vodni hosp 14 no. 213 of cover '64.

DVORAK, F., inz.

Seventy-fifth birthday of Bohumil Silny. Vodni hosp 14
no. 12:444 '64.

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of Bryosimum L. genus.
and monotype genus Solanum
figures and 2 tables.

1974
Nagoya botaniki universitate im. Iwao
University of Nagoya, Japan

2001: 3.

2001: 25

OTHER: 341

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• The following documents
are available:

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DVORAK, Frantisek

The karyotype *Dailogma tristis* (L.) Spach. Biologia (Bratisl)
20 no.7:546-547 '65.

1. Botany Department, J.E.Purkyne University, Brno.

L 9772-66

ACC NR: AP6001425

SOURCE CODE: CZ/0049/65/000/002/0085/0089

AUTHOR: Dvorak, Frantisek—Dvorzhak, Frantisek (Doctor)

ORG: Botanical Faculty, University of J. E. Purkyne, Brno

TITLE: Nectaires of Deilosma Tristis (L.) Spach

SOURCE: Biologia, no. 2, 1965, 85-89

TOPIC TAGS: plant morphology, plant physiology

ABSTRACT: Comparison of the monotype genus Deilosma with the closely related genus Hesperis shows that the Hesperis does not have any median nectaries, and the side ridges are only slightly indicated. Therefore, the high percentage of the plants Deilosma Tristis (L.) Spach possessing median nectaries indicates that this is the older genus. The presence of nectaries, together with other morphological characters, is enough to differentiate between the genus Deilosma and Hesperis. Orig. art. has: 1 figure, 2 tables. [JPRS]

SUB CODE: 06 / SUBM DATE: none / ORIG REF: 002 / OTH REF: 005

PC

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CZECHOSLOVAKIA

DVORAK, F; DEDEK, V

Institute of Organic Chemistry, Technical Institute
of Chemistry (Institut fur organische Chemie, Technische
Hochschule fur Chemie), Prague - (for both)

Prague, Collection of Czechoslovak Chemical Communications,
No 7, July 1966, pp 2727-2736

"Electrofluorination of fluorides of chloro-acetic acid."

Dvorak, Ivo

Family Name, First
Given Name(s)

Country: Czechoslovakia

Academic Degrees: MD

Affiliations: No II Clinic of Internal Medicine (II. vnitřní klinika) in Brno. Head: professor Jiri POLAK, MD.

Sources: Prague, Vnitřní lékařství, No 4, Apr 61, pp 361-370

Data: "The Question of the Preinfarction Stage."

Co-authors:

MORAVIČEK, Jiří, MD. No II Clinic of Internal Medicine, Brno.

DVORKA, Ivo, MD.

CHACO 11-12-1

STUFA, M., Jrt. MOSAK, J.; DVORAK, I.

Second Internal Medicine Clinic of the Medical Faculty
of UJEP (II. vnitri klinika lekarske fakulty UJEP)
Brno (for all)

Prague, Vnitri Lekarstvi, No 9, 1964, pp 864-868

"The Syndrome of Aggravating Angina Pectoris."

MOCEK, Jiri; STEFFA, Milos, ml.; DVORAK, Ivo

Pathological and anatomical aspects of the ischemic cardiac
pain in intermediate coronary syndrome. Vnitrní lek. 11
no.12:1152-1157 D ' 65.

1. II. vnitrní klinika lekarske fakulty University J.E.
Purkyne v Brne (prednosta - prof. Dr. Jiri Polcak).

DVORAK, J.; MATYSKA, B.

Thermal destruction of polychloroprene. Coll Cz Chem 28
no.9:2387-2392 S '63.

1. Department of Physical Chemistry, Charles University, Prague, and
Institute of Physical Chemistry, Czechoslovak Academy of Sciences,
Prague.

ARIENT, J.; DVORAK, J.; SNOBL, D.; HAVLICKOVA, L.

Imidazole dyes. Pts. 10-11. Coll Cz Chem 28 no.9:2479-2490,
2534-2536 S '63.

1. Forschungsinstitut fur organische Synthesen, Pardubice-
Rybitvi.

CZECHOSLOVAKIA

DVORAK, J.; JAMBOR, V.; Chair of Dietetic Nutrition and Fodder,
Veterinary Faculty, College of Agriculture (VSZ, Veterinarni
Fakulta, Katedra Vyzivy, Dietetiky a Pichnarstvi), Brno.

"Biological Evaluation of Fodder Root Crops."

Prague, Veterinarni Medicina, Vol 11, No 10, Oct 66, pp 613-620

Abstract /Authors' English summary modified 7: Losses of vitamin C in fodder prepared from potatoes and beet were investigated. At harvest potatoes contain 17.05 mg%, and beet 10.88 mg% of vitamin C. During storage up to 78% may be decomposed in potatoes, and 70% in beet. Frost causes a loss of 7.6% in potatoes, and 10.8% in beet. Combined loss due to frost and rot damage may destroy up to 94% of the vitamin in beet. Cooking of potatoes destroys 16-26%, and of beet 60% when fresh; in stored beet the loss may amount to 90%. Conservation methods serving to maximize the amount of vitamin C in the fodder are discussed. 2 Figures, 2 Western, 5 Czech references. (Manuscript received 28 Feb 66).

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ARIENT, J^csef; DVORAK, Jan; KOKES, Petr

Oxidation of naphthoylene-bis-benzimidazoles. Chem prum
13 no.5:245-246 My '63.

1. Vyzkumný ustav organických syntez, Pardubice - Rybitvi.

DVORAK, Jan

Fine machining on planing machines replaces grinding.
Stroj vyr 11 no. 12: 603-606 '63.

1. Zavody V.I. Lenina, n.p., Plzen.

ACCESSION NR: AP4022221

Z/0041/64/000/002/0160/0171

AUTHOR: Dvorak, Jan (Dvorzhak, Yan) (Engineer, Candidate of technical sciences)

TITLE: Bonding of a circular orthotropic loosely supported plate

SOURCE: Strojnický časopis, no. 2, 1964, 160-171

TOPIC TAGS: stress, strain, elasticity, deformation, orthotropy, Kirchhoff law, Poisson ratio, Mohr circle, Fourier series, Euler equation, Hooke law

ABSTRACT: The author gives an approximate solution of the stress and strain in a circular square-orthotropic plate loosely supported over the circumference and loaded by a transverse uniformly distributed load. The substance of the calculation is that the solution is assumed to be in the form of the sum of two functions w_1 and w_2 . The function w_1 satisfies all random conditions but the moment condition at the edges of the plate, and w_2 is a correcting function by means of which the resulting solution also satisfies the random moment condition. It is presented in the form of an infinite series, and only the first two terms of that series are used in the calculation. The theoretical solution is accomplished by the results of numerical calculations and by graphs of the radial and

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ACCESSION NR: AP4022221

circumferential moments for three values of the central angle and for the solution with and without correction. Orig. art. has: 60 formulas, 3 figures, and 1 table.

ASSOCIATION: Statni vyzkumnny ustav tepelne techniky, Prague (State Research Institute of Thermal Engineering).

SUBMITTED 15Mar63

DATE ACQ: 08Apr64

ENCL: 00

SUB CODE: AP

NO REF Sov: 003

OTHER: 001

Card 2/2

Report presented at the 1st All-Union Congress of Theoretical and Applied Mechanics,
Moscow, 27 Jan - 1 Feb '60.

123. V. A. Kholodov (Ukraine): The state of stress and deformation of
elastic shells under hydrodynamic loading and forms of the general
solution of the problem of stability associated with harmonic functions.

124. A. N. Gentrich (Ukraine): Generalization of the method of
perturbations applied in structural mechanics.

125. P. I. Dzhupar (Russia), V. V. Pereg. (Mathematika): Surface
phenomena in the mechanics of plates.

126. A. I. Dzhupar (Ukraine): Experimental data concerning the mechanics
of vibration.

127. G. M. Sidel'nikova (Ukraine): A linear problem of

quasistatic thermoelasticity. A finite difference analysis of
quasistatic shells with variable thickness.

128. N. F. Slobodan (Serbia): Generalization of a perturbation method of
perturbations in problems of the theory of elasticity of anisotropic
material.

129. N. F. Slobodan (Serbia): The methods of solutions of equations of
the mechanics of structures, methods by means of special
matrix methods.

130. N. F. Slobodan (Serbia): A method of investigating the
harmonic stresses and strains due to ship motions in anisotropic
multilayer shells.

131. A. V. Stachuk (Ukraine): The stability of an ellipsoidal
shell.

132. A. I. Matroshko, L. B. Radulovich (Ukraine): A problem in the
mechanics of shells under dynamic loading due to the motion of a ship
over waves.

133. N. F. Slobodan (Serbia): A method of investigating the
harmonic stresses and strains due to ship motions in anisotropic
multilayer shells.

134. A. I. Matroshko (Ukraine): Friction in shells under static
and dynamic loads.

135. A. I. Matroshko (Ukraine): The determination of the ground under
frictional foundations.

136. N. F. Slobodan (Serbia): On stresses and strains of other
types of shells under static and dynamic loads.

137. N. F. Slobodan (Serbia): On stresses and strains of other
types of shells under static and dynamic loads.

138. N. F. Slobodan (Serbia): Determination of the bending
moment in shells taking account of the bending
energy of shells.

139. N. F. Slobodan (Serbia): The integral operator
method of calculating the creep characteristics of shells
from observations in ships.

140. N. F. Slobodan (Serbia): On the propagation of plastic waves
in shells.

141. A. I. Zaitsev (Russia): Plastic properties of a plastically
deformed metal under combined loading.

142. A. I. Zaitsev (Russia), R. P. Kostyuk (Ukraine):
On the propagation of plastic waves in the deformation
of the tension in the shell of a ship's side armor.

143. N. F. Slobodan (Serbia): On the propagation of plastic waves
in shells under static and dynamic loads.

144. N. I. Zaitsev (Russia): On the erosion-fatigue.

145. I. I. Ivashchenko, G. I. Kots (Ukraine): An experimental study
of the propagation characteristics of shear waves in aluminum
cavitated.

146. I. I. Ivashchenko (Ukraine): The propagation of an elastic
wave in an underground explosion.

147. I. I. Ivashchenko (Ukraine): On the state of stress in anisotropic
metals under the action of shock waves.

148. I. I. Ivashchenko (Ukraine): On the laws of deflection
of plastic waves.

149. I. I. Ivashchenko (Ukraine): Flow of uniaxialized soils

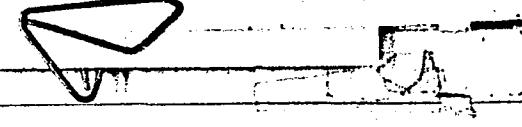
under dynamic loading.

150. I. I. Ivashchenko (Ukraine): The properties of magnetic materials
under dynamic loading.

151. I. I. Ivashchenko (Ukraine): On the anisotropy of charistic and
plastic waves.

152. I. I. Ivashchenko (Ukraine): Plastic tension and
shear waves in metals that have become anisotropic
under dynamic loading.

153. I. I. Ivashchenko (Ukraine): Investigation of anisotropic structures by
means of ultrasonic methods.



DVORAK, J.

"Semicircular plate in an elastic and plastic condition"

Aplikace Matematiky. Praha, Czechoslovakia. Vol. 4, no. 1, 1959

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 7, July 59, Unclassified

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411620017-9

DVORAK, J.

Coatings based on water soluble resins. Jemma mech opt 7
no.10:324 0 '62.

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411620017-9"

DVORAK, Jiri

Methods of wage fund revision in case the number of employees does not correspond to the plan. Prace mzd a 11 no. 10:444-450 0 '63.

CHALOUPKA, Vojtech; DVORAK, Jan, ins.

The 5,5 MHz transmitter, type UVR BD 8 W. Geol pruzkum 6
no. 2658-59 F'64

1. Ustav pro výzkum rud, Praha.

24286

11800

2/032/61/011/008/005/009
E073/E535

AUTHORS: Sýkorová, V., Dvorák, J., Průšek, J. and Vychytíl, P.

TITLE: Continuous anodic oxidation of aluminium conductors

PERIODICAL: Strojírenství, 1961, Vol.11, No.8, p.634

TEXT: A technology of continuous oxidation of aluminium conductors was developed in which a superimposed current is applied at a current density of about 150 A/dm^2 . Within 15 sec an oxide layer about 8μ thick forms which fully satisfies electrical requirements. The use of the extremely high current densities was made possible by feeding in the current through a liquid and using a special cooling system. The quality of the oxide layer is monitored by an automatic unit. A three-pole optical and sound signalling system gives information to the attending personnel on the state of the process. The oxide layers can withstand temperatures up to 300°C so that they form an insulation of the highest thermal class. In contrast to organic insulating materials, these layers also have a high resistance to high energy radiation in atomic reactors, accelerators etc. The breakdown

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Continuous anodic oxidation ...

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voltage of an 8 μ layer is about 200 V r.m.s. and can be doubled by impregnation. The thus insulated conductors can be wound by conventional methods with a minimum curvature of eight times the wire diameter. These aluminium conductors enable increasing the thermal class of the windings and reducing the total weight of electrical machinery; pilot plant manufacture of these conductors has commenced.

1960, Prague: SVUOM 45/60

[Abstractor's Note: Complete translation.]

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CIA-RDP86-00513R000411620017-9"

DVORAK, J.

"Calculating stress and deformations in spiral casings of hydraulic machines," p. 170.

STROJIRENSTVI. (Ministerstvo tezkeho strojirenstvi, Ministerstvo presneho strojirenstvi a Ministerstvo automobiloveho prumyslu a zemedelskych stroju). Praha, Czechoslovakia, Vol. 9, No. 3, Mar. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, No. 8,
August 1959.
Uncla.

CZECHOSLOVAKIA

DVORAK, J., Chair of Foods, Dietetics and Technical Zoology of the Veterinary Faculty of the University for Agriculture at Brno, Head Asst. Prof. J. Kabrt (Z katedry vyzivy, dietetiky a zootechniky veterinarni fakulty VSZ v Brne, prednosta doc. dr. J. Kabrt).

"The influence of Antibiotics in the Fodder Upon the Metabolism of Vitamin C in Growing Pigs."

Prague, Veterinarni Medicina, Vol. 8, No. 1, Jan. 63, pp 57 - 64.

Abstract [Author's English summary modified]: Chlorotetracycline and L-ascorbic acid were used in experiments. Antibiotics increased utilization of forage and gain in weight. No sign of deficiency of vitamin C was found when ascorbic acid was not added to fodder. Antibiotics did not increase the content of vitamin C in the blood serum. No references.

- END -

DVORAK, J.; TRUPLOVA, E.

Determination of sodium in the presence of titanium by
flame photometers. Coll Cz Chem 28 no.6:1609-1612 Je '63.

1. Forschungsinstitut für anorganische Chemie, Usti nad Labem.

"APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411620017-9

DVORAK, JAR. (Prague)

"Determination of the state of stress near a cross-shaped crack".

report presented at the 2nd All-Union Congress on Theoretical and Applied Mechanics, Moscow, 29 January - 5 February 1964

APPROVED FOR RELEASE: 08/25/2000

CIA-RDP86-00513R000411620017-9"

DVORAK, J.

Tasks of machine-tractor stations in 1955. p. 1.
MECHANISACE ZEMEDELSTVI. Vol. 5, No. 1, Jan. 1955

SO: Monthly East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955 Uncl.

DVORAK, J.; VAGENKNECHT, J.

Let us handle fruit tree sprayers carefully. p. 29.
MECHANISACE ZEMEDELSTVI. Vol. 5, No. 2, Jan. 1955

SO: Monthly East European Accession, (EEAL), LC, Vol. 4, No. 9, Sept. 1955 Uncl.

DVORAK, J.

Successful mastering of the spring work, prerequisite for a high yield per hectare.

p. 41
Vol. 6, no. 3, Feb. 1956
MECHANISACE ZEMEDELSTVI
Praha

SO: Monthly List of East European Accessions (EEAL), LC, Vol. 5, no. 12
December 1956

DVORAK, J.

"Activities of the State Testing Station for Agricultural Machinery lead to greater efficiency in the production of agricultural machinery."

p. 21 (Zemelske Stroje, Vol. 3, no. 1, Jan. 1958, Praha, Czechoslovakia)

Monthly Index of East European Accessions (EEAI) IC, Vol. 7, no. 9,
September 1958

DVORAK, J.

"Introduction of new machines into agricultural production, an important factor in the growth of labor productivity and in the reduction of production cost."

SBORNIK. RADA ZEMĚDĚLSKÁ EKONOMIKA. Praha, Czechoslovakia, Vol. 32, No. 6, June 1959.

Monthly List of East European Accessions (EEAI), LC, Vol. 8, No. 9, September 1959.

Unclassified.

DVORAK, JOSEF

L 41519-65 ARG/220-2/EWG(j)/ZXT(d)/FBG/FSS-2/EWG(r)/ZXT(1)/FBG/EJP(e)/
EWT(e)/FS(v)-3/EPF(c)/EEC(k)-2/E.G(s)-2/E.P(i)/ZXT(f)/EWG(r)/ZEP(c)/ZEP(v)/ZFA(1)/
EPR/EWP(j)/T-2/EWG(a)-2/E.P(h)/EPA(bb)-2/EEC(e)-2/ZED-2/EWG(c)/PCS(k)/ZEP(b)/
AM4U5110 P1-4/Pw-4/Pz-4/Pn-4/ BOOK EXPLOITATION Pi-4/Ph-4/Pac-2/Ps-4/Pr-4/ / 163
Po-4/Po-5/Pq-4/Pac-4/Pr-4 IJP(c) AST/TT/JN/DD/RM/GU/BC/JH 141
Barvir, Miroslav, (Engineer); Eences, Konrad, (Professor, Doctor); Bouška, Jiří,
(Doctor); Mudil, Ivo, (Graduate in Philosophy); Čepička, Zdeněk, (Candidate of B1,
Physical and Mathematical Sciences); Cech, Milan, (Doctor); Dolceal, Vladimír, (Doctor);
(Doctor); Dvorak, Antonín, (Candidate of Medical Sciences); Dvorak, Josef, (Doctor);
Guth, Václav, (Candidate of Medical Sciences, Docent, Doctor); Horák, Zdeněk,
(Doctor of Physical and Mathematical Sciences, Corresponding Member of the
Czechoslovak Academy of Sciences, Professor, Doctor); Hosopdar, Jan, (Doctor of
Physical and Mathematical Sciences, Doctor); Kleczek, Josip, (Doctor); Klest,
František, (Candidate of Physical and Mathematical Sciences); Kolodovský, Milan; Koml.
Vladimir (Doctor); Kopecký, Miloslav, (Candidate of Legal Sciences); Krivský,
Ladislav, (Candidate of Physical and Mathematical Sciences); Kvíz, Zdeněk, (Can-
didate of Physical and Mathematical Sciences); Ledvina, Milan, (Engineer); Maloik,
Vladimír, (Doctor); Morávek, Milan, (Candidate of Medical Sciences); Mrazek,
Jaroslav, (Candidate of Medical Sciences, Engineer); Mrazek, Jirí, (Candidate of
Technical Sciences); Neuzil, Ludek, (Doctor); Novotný, Zdeněk, (Candidate of
Physical and Mathematical Sciences); Novotný, Zdeněk, (Doctor); Pernegr, Jaroslav,
(Doctor); Candidate of Physical and Mathematical Sciences); Pešek, Rudolf, Professor,
Doctor, Engineer); Pípal, Miloslav, (Doctor of Technical Sciences, Corresponding
member, of the Czechoslovak Academy of Sciences); Flávec, Miroslav, (Doctor);
Pokorný, Zdeněk, (Candidate of Physical and Mathematical Sciences, Docent, Doctor);

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Ruml, Vladimir, (Candidate of Medical Sciences, Doctor); Sadil, Josef, (Doctor of Physiological Sciences); Schmal, Ladislav; Stverak, Jiri, (Doctor); Svetka, Zdenek, (Doctor); Tuma, Jaroslav, (Candidate of Physical and Mathematical Sciences, Doctor); Tytl, Vaclav, (Docent, Engineer); Michla, Ivan, (Candidate of Technical Sciences, Professor, Doctor); Valniecek, Boris, (Candidate of Physical and Mathematical Sciences, Doctor); Vanysek, Vladimir, (Candidate of Physical and Mathematical Sciences, Docent, Doctor); Vlacak, Marian, (Candidate of Physical and Mathematical Sciences; Doctor); Voda, Miloslav, (Engineer)

Principles of astronautics (Zakladky kosmonautiky) Prague, Orbis, 1964. 445 p. illus., biblio. 5000 copies printed.

TOPIC TAGS: cosmonautics, rocket, satellite, space flight, missile 15

PURPOSE AND COVERAGE: This publication is a popular scientific reference book for people working in cosmonautics. The book presents a survey of cosmonautics and space flight up to 1 June 1963.

TABLE OF CONTENTS:

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Internal Medicine

CZECHOSLOVAKIA

FRANK, Zdenek; STVERAL, Jiri; DVORAK, Josef: Institute of Aero-nautical Medicine (Ustav Leteckeho Zdravotnictvi), Prague.

"Radio Waves Another Scourge of Civilization."

Prague, Radar, Vol 1, No 3, Nov 66, pp 56 - 58

Abstract: Factors influencing the medium in which people are living are discussed. Radio waves are defined as waves with frequencies between 100 kilocycles and 3,000,000 kilocycles, that is waves 1 cm to 3.000 meters long. Although these waves do not affect the senses of the body, they do have an influence on it. Thermal and non-thermal effects of the radio waves on the human organism are described. Clinical aspects of these effects are evaluated. Some of these effects are described in detail. Protection against the influence of electromagnetic fields is discussed; some peculiar effects of these fields on human beings are described. Biological effects of radio waves are discussed. 1 Table, no references.

1/1

SVOBODA, Jaroslav; HRBEK, Antonin; KADLEC, Jiri; DVORAK, Jiri

Preparatory precision casting of metallic molds into a
prehardened mixture. Slevarenstvi 10 no.8:308-311 Ag '62.

1. Ceskomoravska-Kelben-Danek Praha, Slevarny.

DVORAK, J.

Mechanical tests in laboratories, guarantee of the quality of material.
p. 217. TEXTIL. (Ministerstvo lehkého průmyslu) Praha. Vol. 2, no. 7,
July 1954.

SOURCE: East European Accessions List, Vol. 5, no. 2, September 1956

DVORAK, J.

Solution of topical tasks in the cotton industry. p. 55.

TEXTIL. (Ministerstvo lehkého průmyslu) Praha, Czechoslovakia. Vol. 14, no. 2,
Feb. 1959.

Monthly list of East European Accessions (EEAI), LC, Vol. 8, no. 10, Oct. 1959. Unclassified.

DVORZHAK, I.

ARAKhNE stitcher for nonwoven materials. Tekst.prom. 19
no.12:75-76 D '59. (MIRA 13:3)

1. Nauchno-issledovatel'skiy institut trikotazhnay promy-
shlennosti v g.Brno.
(Czechoslovakia--Textile machinery)

DVORAK, J.

Present state of knitting techniques abroad. p. 91.

TEXTIL. (Ministerstvo lehkého průmyslu) Praha, Czechoslovakia. Vol. 1h,
no. 3, March 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 11,
November 1959.

Uncl.

CZECHOSLOVAKIA

VACIK, J.; DVORAK, J.

Institute of Physical Chemistry, Karlova University, Prague (for both)

Prague, Collection of Czechoslovak Chemical Communications, No 2, Feb
1966, pp 863-870

"Effect of the inhomogeneity of the electric field on the shape of the
zones in paper electrophoresis."

CZECHOSLOVAKIA

ARIENT, J; DVORAK, J; NEPRAS, M; KOKES, P.

Research Institute for Organic Synthesis, Pardubice-
Rybitvi - (for all).

Prague, Collection of Czechoslovak Chemical Communications,
No 11, November 1965, pp 3718-3729.

"Imidazol dyes. Part 15: Presentation of arolylenimidazol
dyes and the influence of substitution on their coloring
properties."

(4)

L 12950-60

ACC NRI AP6005663

SOURCE CODE: CZ/0079/65/007/002/0174/0175

JJ

B

AUTHOR: Formanek, J.; Dvorak, J.

ORG: Research Institute of Post and Telecommunications, Prague

TITLE: Subjective and electroencephalographic responses to weak intermittent optic stimuli [This paper was presented at the Third Interdisciplinary Conference on Experimental and Clinical Study of Higher Nervous Functions held in Marianske Lazne from 19 to 23 October 1964.]

SOURCE: Activitas nervosa superior, v. 7, no. 2, 1965, 174-175

TOPIC TAGS: EEG, light biologic effect

ABSTRACT: The authors proved experimentally that weak intermittent optical stimuli caused EEG reactions; the reactions were not caused by undesirable electrical couplings. They have a specific frequency, and are not caused by broad band activation or inhibition of the EEG. [JPRS]

SUB CODE: 06, 05 / SUBM DATE: none

Card 1/1 HW

DVORAK, J.; OTCENASEK, M.

Adiaspiromycosis. Cesk. epidem. 14 no.1:65-68 Ja '65

1. Parazitologicky ustav Ceskoslovenskej akademie ved,
Praha.

DVORAK, J.; BURIAN, J.; BURDA, M.

Multiple diverticulosis of the jejunum. Cesk. radiol. 18
no. 6:407-411 N '64.

1. Rentgenologicky ustav (prednosta doc. dr. J. Doubravsky,
CSc.), II. chirurgicka klinika (prednosta doc. dr. J. Burian)
lekarske fakulty Palackeho University v Olomouci.

FORMANEK, J.; DVORAK, J.

Subjective and electroencephalographic responses to weak intertent optic stimuli. Activ. nerv. sup. (Praha) 7 no. 2
174-175 '65

1. Research Institute of Post & Telecommunications, Prague.
2. J.Formanek's address: Praha, Kovrova 2.

MANN, Miroslav; DVORAK, Jan

Our experience with the use of knot reinforcing mesh in operations for hernias of the anterior abdominal wall. Rozhl. chir. 41 no.2: 143-146 F '62.

1. Chir. odd. nemocnice v N. Meste na Mor., prednosta MUDr. M. Mann
Vyzkumny ustav pletarsky v Brne, reditel B. Piller.

(HERNIA VENTRAL surg)

DVORAK, Jan

URBANEK, Karel; DVORAK, Jan

Late results of surgery in hallux valgus. Acta chir. orthop. traum.
cech. 25 no.3:241-244 May 58.

1. Ortopedicka klinika VIA J. Ev. P. v Hradci Kralove.

(HALUX, surg.

technics in hallux valgus, late results (Cz))

FORMANEK, J.; DVORAK, J.

Subjective critical flicker fusion frequency of intermittent
optic stimuli and photic driving response. Act. v. nerv. sup.
6 no.1:65-66 '64.

*

DVORAK, J.

A transistorized integrator of bio-electrical potentials with
decimal divider of output frequency. Activ. nerv. sup. 5 no.4:
393-399 *63.

1. Vyzkumný ustav spoju, Praha.

DVORAK, Jan

Unconventional method of frequency division and pulse counting
by using a core with rectangular hysteresis loop. Slaboproudny
obzor 24 no.11:654-658 N°63.

1. Vyzkumny ustav spoju, Praha.

L 20518-66 T JK
ACC NR: AP5021659

(A)

SOURCE CODE: CZ/00-7/65/014/004/6229/6232

AUTHOR: Otcenasek, M.; Dvorak, J.; Prokopic, J.

ORG: Institute of Parasitology of the Czechoslovak AS (Parazitologicky ustav CSAV, Prague)

TITLE: Isolation of Emmonsia crescens Et Jellison 1960 on the territory of the CSSR
(The Czechoslovak Soviet Socialist Republic)

SOURCE: Ceskoslovenska epidemiologie, mikrobiologie, imunologie, v. 14, no. 4,
1975, 229-232 and insert 4X facing page 225

TOPIC TAGS: paracite, animal parasite, animal microbiology, parasitology, parasitism

ABSTRACT: The article reports on the successful isolation of Emmonsia crescens Emmons et Jellison 1960 and on the mycological characteristics of the first Czechoslovak isolates of this organism. The present study is a continuation of earlier studies in that it continues the investigation of the infected lungs of small mammals in an attempt to isolate the alfaapiromycesis agent. The mycological investigation was made of the lung tissue of 119 live, wild rodents and insectivores caught live around Novy Budzov and subsequently put to death after removal of the ectoparasites. The animals caught represented six (6) species. Three specimens of Microtus arvalis were isolated from the lung tissue investigated. Macroscopic spherules, the parasitic stage of the

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organism, were observed only in one case. The investigators were successful in making a culture of this agent. This is the first recovery of *Emmonsia crescens* Emmons et Jellison 19⁶⁰ in central Europe and is attributed to their understanding of the microbiology, ecology, and geography of this mycotic antigen. The morphophysiological characteristics of the isolated strains completely correspond to the initial descriptions of isolates of *Emmonsia crescens*. Orig. art.lns: 1 table.

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SUB CODE: 06

SUBM DATE: none

OTH REF: 008

Card 2/2

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Tan, Tan-Engineer.

Stress in a plate weakened by a square cutout. - 1

Voprosy matematicheskoy mehaniki, v. 8, no. 3, 1963, 14-17.

perforated-plate stress, thermal stress, temperature distribution

stress distribution in a plate perforated with a square hole
with edges over its width, simple, homogeneous material, plane stress, plane strain, boundary conditions, boundary value problem, finite difference method, numerical solution, boundary conditions, boundary value problem, finite difference method, numerical solution.

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26.22.10

AUTHOR:

Dvořák, Jan

TITLE: Several Strength Problems of Nuclear Reactor Pressure Vessels 19

PERIODICAL: Jaderná energie, 1960, No. 5, pp. 146 - 149

TEXT: In nuclear reactor design a number of characteristic strength problems are encountered. The choice of dimensions of the reactor vessel depends not only on the basic stress due to the internal overpressure, but also on a number of additional factors, namely: 1) Additional bending stresses originating in the vessel wall due to a sudden change of radius or thickness. 2) Stresses originating in the vessel wall in the vicinity of supports. 3) Stress increases in the transition area between the cylindrical part and the lower head of the vessel. 4) Distribution of stresses in the vicinity of inlet and outlet pipe penetrations. 5) Thermal stresses due to non-uniform distribution of heat across the length and thickness of the vessel wall. 6) Thermal-stress increases due to changes in operating conditions. - In the upper- and lower-vessel heads additional stresses arise in the vicinity of ports of technological channels. It is, therefore, necessary to ensure not only a sufficient strength but also an ade-

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Several Strength Problems of Nuclear Reactor Pressure Vessels

quate rigidity of the heads. In the following the above-mentioned problems will be dealt with in detail. 1) Additional bending stresses originating in the wall due to a sudden change of its radius or thickness. In reactor designs it is necessary at times to introduce a sudden change of the centerline radius, e.g., in a recess for the core base-plate support, for rests of thermal shield, etc. The difference between both radii - ϵ , the internal pressure - p , the vessel-wall thicknesses - h_1 and h_2 , and the centerline radius - r (Fig. 1a and 1b). Since the $\frac{\epsilon}{r}$ value is usually in the order of 10^{-2} , it is irrelevant which of the two centerline radii we choose. If the ends of the cylinder, or other sources of additional stresses, are at a distance from the recess larger than $2.45\sqrt{r \cdot h_{1,2}}$, then the axial component of additional stress is

$$\sigma_{01} = \frac{3 p r \epsilon h_2^{\frac{5}{2}}}{2(h_1^{\frac{3}{2}} + h_2^{\frac{3}{2}})} \quad (1)$$

This relation can easily be deducted from the condition of equal angle of tilt of two coaxial, semi-infinite cylinders with wall thickness h_1 and h_2 , respec-

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Several Strength Problems of Nuclear Reactor Pressure Vessels

tively, loaded around their circumferences by an evenly distributed moment $\frac{p_r e}{2}$. The upper free end of the cylinder with a wall thickness h_1 is loaded by a moment $\frac{p_r e}{2} - M$, the lower end only by the internal moment M . From the condition of equal tilt angles of the cylinder ends, loaded with an evenly distributed moment (Ref. 1, p. 205), we obtain the equation for the unknown moment M

$$\frac{1}{\beta_1 D_1} \left(\frac{p_r e}{2} - M \right) = \frac{M}{\beta_2 D_2}$$

where β is the damping coefficient

$$\beta_{1,2} = \sqrt{\frac{3(1-\nu^2)}{h_{1,2}^2 r^2}}$$

and $D_{1,2}$ the bending rigidity.

$$D_{1,2} = \frac{Eh_{1,2}^3}{12(1-\nu^2)}$$

If the internal moment M is known, the axial component of additional stress $\sigma_{01} = \frac{6M}{h_1^2}$. By substituting these relations in the previous deformation condi-

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